

Can Artificial Intelligence Technology Replace Compliance Lawyers?

Abstract: The development of artificial intelligence technology has brought opportunities and challenges to the lawyer industry, but existing research lacks examination of these opportunities and challenges from specific business fields. The emergence of new technologies has squeezed out the business space of compliance lawyers, but it will never replace compliance lawyers. Compliance lawyers should properly face changes in business preparation, participation areas and work priorities, enhance their technical competence, and achieve a positive interaction between artificial intelligence development and compliance business iterations.

Keywords: Artificial intelligence, Compliance, Lawyer

I. STATEMENT OF PROBLEM

Since the era of Industry 4.0, artificial intelligence technology has continued to make breakthroughs. Artificial intelligence technology is constantly being used in various fields, triggering a lot of discussions about artificial intelligence and personnel employment, professional activities, social labor structure and other issues. "Whether artificial intelligence may replace lawyers one day in the future" is also one of them. In early 2023, Chat GPT 4.0 (hereinafter referred to as "GPT") developed by OpenAI once again ignited this protracted debate. Because GPT can better track and manage text to provide more coherent and relevant responses; it can better handle ambiguous natural language and output more accurate answers; it can continuously adjust the answers it outputs based on user feedback on the answers. Given various advantages, for example, better user experience, GPT has high hopes. Because GPT can better track and manage text to provide more coherent and relevant responses; it can better handle ambiguous natural language and output more accurate answers; it can continuously adjust the answers it outputs based on user feedback on the answers. Providing various advantages such as better user experience, GPT can be used for writing outline generation, question consultation reply and other purposes. ¹It is not difficult to find that, to a certain extent, GPT can answer the client's inquiries and draft documents for the client like a lawyer. In this case, it is not surprising that there are remarks that "artificial intelligence will replace lawyers."

Whether at home or abroad, research on the relationship between artificial intelligence technology and the legal profession mainly focuses on macro-level issues. Discussions on the

¹Ray, Partha Pratim. " *ChatGPT: A comprehensive review on background, applications, key challenges, bias, ethics, limitations and future scope.* " Internet of Things and Cyber-Physical Systems (2023).

topic of "the relationship between technological development and the legal profession" have been commonplace. People participating in this protracted debate can be roughly divided into two groups. One group is more traditional, starting from artificial intelligence's involvement in illegal practice, maintenance of professionalism, and protection of lawyers. From the perspective of client interests, they exaggerate the problems that the emergence of emerging technologies may bring about, such as difficulty in accountability of artificial intelligence lawyers and uncontrollable legal services caused by algorithm black boxes. The other group starts from the perspective of reducing the cost of legal services and improving the availability of legal services, arguing that the automation of lawyers' work should be promoted as much as possible. As a representative of emerging technologies, the impact of artificial intelligence technology on the legal profession cannot escape the framework outlined in the aforementioned discussion. Based on the above discussion, whether artificial intelligence can replace lawyers has become a hot topic. In addition to the clichéd two-point debate, there is also a compromise view that believes the relationship between artificial intelligence and lawyers is a benign interactive relationship. Both have their own comparative advantages and disadvantages, and they need win-win cooperation to achieve success. Achieve their own sound development and conform to the development trend of the times.² Some scholars used specific data to analyze the specific impact of artificial intelligence technology through modeling, and finally concluded that technology is changing the legal profession, rather than simply replacing the legal profession.³ However, despite the detailed data support, it is difficult to cover up the fact that the current academic research on artificial intelligence technology and the lawyer profession focuses on a macro perspective. Existing research is keen to analyze structural issues such as whether the development of artificial intelligence technology can replace the lawyer profession from an abstract perspective, and what impact artificial intelligence technology will bring to the lawyer profession. It does not pay enough attention to meso- and micro-level issues.

Not only that, professional rules urgently need to respond to the impact of technological development. For example, the American Bar Association added the concept of "technical competence" to lawyers in Note 8 of Rule 1.1 of its newly revised Model Code of Professional Conduct for Lawyers: "In order to maintain requisite knowledge and skills, lawyers should keep in touch with the law and its practice. Changes include the benefits and risks of relevant technologies, and participation in continuing learning and education..." China's Lawyers Law does not stipulate this, and it is necessary to prepare for the addition of this concept and related provisions in

² Ye Jing: "Application of Artificial Intelligence in the Field of Legal Services", published in "Journal of Anhui Police Vocational College", Issue 3, 2019.

³ Remus D, Levy F. *Can robots be lawyers: Computers, lawyers, and the practice of law*, Geo. J. Legal Ethics, 2017, 30: 501.

subsequent legislation. To this end, it is not only necessary to grasp the impact of technology on the lawyer industry at the macro level, but also to understand the application and related impact of technology in specific business fields of lawyers at the meso-level. While deepening the understanding of technology and related impacts, it also provides guidance for future transformation and upgrading for lawyers in current business areas.

Against the aforementioned background, this article intends to start from the compliance business in lawyers' practice and explore whether artificial intelligence technology will have an impact on lawyers' compliance business? Will lawyers in the compliance field be replaced in the future? How should lawyers adjust themselves to the trend?

II. COMPLIANCE PRACTICES AND TECHNICAL MECHANISMS

i. Compliance Practices in China Lawyers' Practice

Before answering the above questions, it is necessary to first delineate the boundaries of a lawyer's compliance business. There is no clear definition of compliance business. From my understanding, "compliance" refers to compliance with law, regulations and other specifications. Norms include laws and regulations, mandatory standards, internal rules and regulations of enterprises, and other norms that are binding on enterprises. The compliance business sprouted at the beginning of this century, and its development history in China's legal service market is not long. There are also different opinions on the classification of compliance business. Professor Chen Ruihua believes that compliance business includes four aspects: compliance plan creation, compliance due diligence, compliance internal investigation, and compliance supervisor. According to descriptions from practitioners in relevant fields, the current compliance business content of lawyers in China is generally divided into six aspects: compliance advisor, compliance consulting, compliance investigation, compliance training, crisis response and compliance system.⁴ Specifically: (1) Compliance advisor business refers to providing daily compliance consulting or advise for enterprises all year round; (2) Compliance consulting business is divided into comprehensive compliance consulting, special compliance consulting, and industry compliance consulting. Comprehensive compliance consulting is to help companies comprehensively sort out compliance risks, or establish and improve compliance management systems; special compliance consulting refers to compliance risks and preventive countermeasures that mainly occur when a company has a certain business link or a certain matter. needs; industry compliance consulting refers to clarifying the compliance development status and future development trends of compliance issues in a certain industry; (3) Compliance investigation

⁴Jiang Xianliang: "Corporate Compliance and Lawyer Services", Law Press 2021 Edition, Part 4.

business is represented by anti-fraud investigations within the enterprise (i.e., targeting corporate employees for violations of regulations, investigation of illegal and criminal acts) and compliance due diligence; (4) Compliance training refers to regular lectures on compliance situations, policies, events and the latest legal regulations for enterprises to help enterprise employees enhance their compliance awareness. Services that promote the improvement of compliance culture and improve the level of compliance management; (5) Crisis response refers to when enterprises face administrative law enforcement, criminal law enforcement investigations, or public opinion crises, compliance lawyers will provide legal and effective responses to help enterprises survive the crisis, reduce economic losses and reputational damage; (6) Compliance system business refers to the business in which lawyers help enterprises establish and improve compliance management systems and subject compliance plans.

On the basis of the above, the author combines the practical sequence of corporate compliance and organizes the specific work of the compliance business as follows: assisting the company to complete the establishment of the compliance system and compliance training for corporate employees in advance; monitoring the compliance of corporate employees, provide consultation on compliance issues encountered by the company during the event conduct, and; conduct subsequent investigations on company employees who have violated the company's internal rules and regulations, and assist the company in completing corresponding crisis responses.

ii. How artificial intelligence technology works

Artificial Intelligence, as the name suggests, is artificially produced "intelligence". Its basic operating mechanism is to model a certain aspect of the world by collecting massive amounts of data for data analysis, and the inferences derived from these models are used to predict and analyze what may happen in the future. Artificial intelligence enables machines to learn from experience (that is, existing data), thereby gradually imitating human cognitive abilities. Its ultimate goal is to "enable computers to perform behaviors that humans would consider intelligent."⁵ Artificial intelligence is essentially a machine learning technology that emphasizes using machines to simulate human intelligence. Its development itself relies on the massive processing of personal data. The intelligence simulated by artificial intelligence can be divided into computational intelligence, perceptual intelligence and cognitive intelligence.⁶ Computational intelligence is the ability to quickly and skillfully calculate according to algorithms and store large amounts of memory. Perceptual intelligence simulates human hearing, vision,

⁵ Edited by Peng Chengcheng, [Germany] Thomas Weischmeyer, [Germany] Timo Rademacher: "Dialogue between Artificial Intelligence and Law 2", translated by Han Xuzhi, Li Hui and others, Shanghai People's Publishing House 2020 edition, page 5.

⁶ Same as the previous note, Ye Jingshu.

touch and other sensory and perceptual abilities; cognitive intelligence simulates human ability to analyze, think, understand and judge problems.

The development of artificial intelligence is inseparable from the three elements of data, algorithms and computing power. Among the three, data is the material basis, computing power is the computing support, and the algorithm is the core driver. In the legal field, the data required by artificial intelligence not only include narrowly defined data presented in digital form, but also include other forms of data such as provisions of laws and regulations, judicial cases and administrative penalty cases. In addition to the above three elements, the development of artificial intelligence is inseparable from human debugging and training: manual data input, manual writing and modification of algorithms, manual correction of answers provided by artificial intelligence (which is also a kind of data input), etc.

III. APPLICATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGY IN COMPLIANCE BUSINESS FIELD

i. Application status in China

At present, the artificial intelligence that is widely used in China's legal service practice mainly includes the following three categories: (1) Litigation business artificial intelligence, represented by "Xiao Zhi", which can help lawyers solve questions, summarize evidence, restore case facts, and calculate returns. It can also help lawyers complete some fundamental and preliminary work such as the amount and writing the first draft of the judgment; (2) Legal consulting artificial intelligence, represented by "Fagou". This kind of Artificial Intelligence can provide customers with the help of media such as images, speech recognition, knowledge maps, and evidence guidance. Also, it can provide legal consulting services such as analysis reports and case predictions; (3) The lawyer collaboration management system, represented by "Fachan", which assists lawyers in managing the case handling process through legal big data, contract databases and other auxiliary technologies. It provides law firm administration management accessibility features. Looking through all the existing scenarios about practice of using artificial intelligence, it can be roughly divided into four categories: legal research and electronic evidence collection, contract and litigation management, legal document automation, and legal big data analysis. It is not difficult to find that the application scenarios of artificial intelligence technology in China's legal service market are still relatively limited, and the functions displayed by artificial intelligence are far from the so-called "strong artificial intelligence" and are still classified as "weak artificial intelligence".

Specific to compliance practices, the most commonly used artificial intelligence technologies

are nothing more than (preliminary) legal document automation and legal big data analysis. Compliance lawyers will use GPT to help them conduct legal researches, collect industry practices (involving a large amount of data collection and analysis to observe and determine the overall compliance level of the entire industry), and corresponding penalty cases (to clarify the bottom line of compliance and make sure where is it), thereby helping it to produce legal documents more quickly, but the current technology is not yet able to completely provide legal opinions and improvement suggestions on compliance or non-compliance by machines.

ii. Application Status outside China

The development of artificial intelligence technology outside the region is relatively mature. For example, *Do Not Pay*, the world's first robot lawyer, is widely used in London, New York and other places, and has helped more than 160,000 people deal with traffic tickets at very low cost. When you fill out a questionnaire, once the robot determines that you are legitimate, it will help you issue a defense authorization letter. More and more law firms (such as Linklaters) have begun to develop and deploy legal artificial intelligence systems to help improve work efficiency or provide legal services in a low-cost model to improve their market competitiveness.

In the book “Tomorrow's Lawyers”, Richard Suskin describes a variety of disruptive legal technologies that are so-called “disruptive” to the legal profession. It mentioned a technology called “embedded legal knowledge”, which can transform legal rules and principles into codes, algorithms, and programs and embed them into our work systems and processes. All system activities need to follow preset paths. The options and mode selections provided by the system are mandatory and fixed. In other words, non-compliance and illegal options are not allowed. To give a more intuitive example, Article 15 of the Labor Law stipulates that employers are prohibited from recruiting minors under the age of 16. After translating this specification into an algorithm in the employee system, it can be determined whether the employee's age meets the mandatory requirements of the Labor Law by automatically identifying the age information in the employee's ID number, or by comparing the employee's self-selected age with legal requirements; Or it can be set up so that employees cannot select a number less than 16 on the age interface to fulfill the company's mandatory compliance obligations. In this way, relying on a pre-established system, which complies with the current law, even people who have no knowledge of laws and regulations can behave compliantly.

This technology is said to be disruptive because: “ Where the rules are embedded, lawyers are no longer needed to alert clients to legally significant situations. Likewise, self-executing contracts, potentially enabled by blockchain technology, will be able to initiate take actions and

automatically execute procedures and terms without the direct involvement of lawyers.”⁷ Judging from the operating model described in this idea, such a technical idea can play a big role in the field of corporate compliance, especially in helping companies build a compliance system. Monitoring of internal employee behavior compliance. Through the guarantee of systems and algorithms, employees within an enterprise can directly act in compliance without having to understand the provisions of laws and regulations; after an enterprise implements such a system, it can also build its internal infrastructure with quality assurance in a very short period of time. compliance system. At the same time, this also saves enterprises a lot of training costs, construction and operation costs of the compliance system. At the same time, this technology will also greatly squeeze out the space for lawyers to participate in corporate compliance, and may even replace lawyers.

In fact, this vision has gradually become a reality to some extent. For example, Seoul-based law firm *Yulchon* has developed a client-centric digital compliance system called “*AlgoCompliance*” whose algorithms can monitor daily regulatory changes on government websites and determine whether such changes may trigger non-compliance issues. Due to various constraints, the author was unable to find a detailed description of the product and had no way of knowing the operating mechanism of its algorithm. Judging from the descriptions of its functions provided by other commentators, this technology can only achieve preliminary compliance supervision, but the problem is not solved by discovery. Whether it is necessary for the company to solve this non-compliance problem and how the company should improve its internal system to solve these problems still relies on the judgment and guidance of professional lawyers.

(3) Summary: The impact of artificial intelligence

The development of artificial intelligence technology will crowd out the activity space of lawyers in compliance business. The advantage of artificial intelligence technology compared to compliance lawyers lies in its low cost, high efficiency and short time. Artificial intelligence technology can allow network security and data management services to be as granular as every byte, without having to sample due to manpower shortage; it can allow computer systems to autonomously generate and create compliance management related information. On the basis of reducing the workload and working hours of repetitive work of natural persons, it can improve the efficiency, accuracy, innovation and cost-effectiveness of the aforementioned data generation; it can also serve as the company's round-the-clock legal advisor, compliance officer, etc. role, and the speed and cost of providing services are hundreds, thousands, or even tens of thousands of the

⁷Richard Susskind, *Tomorrow's Lawyers: An Introduction to Your Future (3rd edition)*, Oxford University Press, 2023.

original.⁸

There is no doubt that automated compliance technology, represented by *Algocompliance* and embedded legal knowledge systems, can help companies complete the initial compliance system establishment, achieve compliance of employee behavior through mandatory programs to save compliance training costs; real-time monitoring of government Changes in regulatory rules automatically implement compliance monitoring and identify non-compliance issues to facilitate lawyers and companies to respond as soon as possible. As a result, nearly 60% of the traditional compliance business will be squeezed out by artificial intelligence technology, increasing the business pressure on compliance lawyers. How to clearly recognize the situation, find the correct positioning, transformation and upgrading in such an era of pressure has become a problem that must be solved.

IV. EMBRACE OPPORTUNITIES: TRANSFORMATION RATHER THAN DISRUPTION

i. Artificial intelligence will not replace lawyers in the compliance field

First of all, laws and regulations are inherently lagging, and artificial intelligence relies on preset algorithms (including existing laws and regulations) to find it difficult to adapt to changes in laws and practices. Even if it is possible to automatically detect changes in laws and regulations, it is difficult to complete the steps of "concept interpretation - compliance system construction - practical behavior analysis and strategy formulation" with artificial intelligence alone. In fact, what artificial intelligence can accomplish is to determine whether the behavioral activities of the company and its employees are compliant based on the company's compliance system, and to prevent obvious non-compliance. In essence, whether it is the arguments behind a legal opinion, the reasoning behind a court's decision, or a legal opinion on alternative courses of action, how to rationalize it is a basic element of logical analysis and a basic skill for legal professionals. In other words, one is able to discern and articulate in clear and coherent terms the logical relationship between a set of premises (which may be factual findings, legal provisions, or other factors) and the legal conclusions or recommendations drawn from these premises. In this regard, there are certain differences in the interpretation of basic principles between the algorithmic logic of artificial intelligence and human cognitive logic. The algorithm path output by artificial intelligence is forward logic, that is, based on a set of data, understanding what is the optimal decision or the most optimal decision. Effective operation process, artificial intelligence lacks reverse logic capabilities. Secondly, from the perspective of an enterprise, compliance is not only

⁸ "The new National Data Agency brings good news and bad news to lawyers! ", contained in the WeChat public account "Compliance", released on October 31, 2023.

a legal obligation, but also a way to shape brand image. The "regulations" that compliance needs to comply with are bottom-line norms, and this bottom line still exists. There is a wide range of room for system establishment, and what kind of compliance strategy the company will adopt requires compliance lawyers to fully discuss and decide with the client from the client's perspective. The current artificial intelligence technology is only "weak artificial intelligence" at best and cannot replace lawyers to complete the above work.

ii. Artificial intelligence will change the practice model of lawyers' compliance business to a great extent

The first shift lies in the shift in compliance business preparedness. Since artificial intelligence technology can complete the summary and sorting of regulatory requirements, the collection and sorting of industry practices, and the summary and analysis of penalty cases in a very short time and with extremely high accuracy, compliance lawyers no longer need to spend a lot of time on Looking for compliance basis; however, the reading, analysis, and interpretation of relevant information and data still require the wisdom of professionals, and compliance lawyers need to invest the saved time in research. The second shift lies in the shift in the field of participation. With the development and implementation of automated compliance technology, compliance training will gradually withdraw from the stage of compliance business. Accordingly, compliance lawyers need to participate in the writing of automatic compliance algorithms and the transformation process of "legal rules-algorithms" to ensure the accuracy of automatic compliance algorithms. The third shift is the change in work focus. The current compliance business is more focused on risk prevention and control beforehand, and prevents corporate employees from committing violations by building a corporate compliance system. However, artificial intelligence and algorithms can control ex-ante risks to a low range. The focus of compliance lawyers' work should shift from ex-ante risk prevention and control to algorithm monitoring, and timely modification of algorithms based on corporate employees' violations.

iii. Compliance lawyers should actively face challenges

Compliance lawyers should actively face the challenges of artificial intelligence and understand and master the application of artificial intelligence in compliance business by improving their technical literacy and "technical competence." At the same time, we should give full play to our professional advantages and use artificial intelligence to process and analyze large amounts of data to improve work efficiency. In addition, more in-depth compliance risk identification and management with the assistance of artificial intelligence technology is needed to adapt to the new working model. Finally, compliance lawyers should also actively participate in legal regulations and ethical discussions related to artificial intelligence, in order to better protect

the interests of enterprises and society in the future when artificial intelligence is widely used.